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ORIGINAL DEPARTMENT.

COMMUNICATIONS.

BRIEF HINTS ON THE PROGRESS OF OTOLOGY, FOR 1878.

The progress made in our knowledge of diseases of the ear, their pathology and treatment, has during the past year been decided and of value, both to the specialist and general practitioner.

Besides the two foreign journals* devoted exclusively to otology there is one published simultaneously in Germany and this country†, and still another one has been announced in New York. One new volume on the diseases of the ear in general has been issued in Philadelphia, and a new edition also of a similar older work has been republished in New York. All this amount of special literature would go to show a demand for a more perfect acquaintance with this important subject by the general practitioner. I shall not enter minutely into the subject, lest detail tire the general reader as well as monopolize too much valuable space in your journal, but I shall be content to jot down and criticise a few points of special interest and practical importance.

1st. "A Case of Cleft Palate with Acquired Deaf muteism. Staphyloraphy, with Recovery. By Dr. A. D. Alt, M. C. P., of Toronto.‡ This case is both interesting and instructive; first, owing to the extreme youth of the patient operated upon—he was only seven—and second, the great improvement of the patient's speech. By the operation the Eustachian orifices were protected against the relapses of middle ear inflammation which are so apt to follow from the entrance of obnoxious substances through the mouth and Eustachian tube. Great improvement followed the local treatment of the ears (patient had otitis media purulenta, with perforation of the left membrana tympani).

The tonsils and pharynx were hyperæmic, and there existed the same condition of the mucous membrane of the nose, especially around the orifices of the Eustachian tubes. Prior to the operation and treatment of the local difficulty the watch of the operator (which was heard at a normal distance of 20′) was heard at two inches on the right, and on the left side, only when pressed against the ear. While the boy understood his mother by watching her lips attentively, he could not understand the doctor at all. The first operation was performed on the 25th of September 1877, and a second, on the uvula, which had cut through, on the 23d of October. On the 15th of December the doctor discharged him, cured.

On the 28th of January, 1878, the following was his report: Medium loud voice heard in left side at 25′, right 20′; "the boy now hears and speaks well enough to go to school and do all the errands for his mother."

I would in this connection make but one observation, and caution those about performing this operation, *i.e.*, staphyloraphy. A close study should be made of the pharynx, Eustachian tubes and their muscles, that they may not be disturbed, for we must do more than simply unite the cleft, and employ local treatment, which in most cases is absolutely necessary. A clear idea of the topographical anatomy of the parts should be had, so that in the operation we may carefully avoid injuring the muscle of the Eustachian tube. It has fallen to our lot to meet with such a case in an

*Archiv für Ohrenheilkunde, and Monatsschrift für Ohrenheilkunde.

†Arch. Ophthalmology and Otology, Wood & Co., New York.

‡Vol. VI, Nos. III and IV, p. 539.

adult, where the surgeon, by his operation, almost completely closed the Eustachian tube of one side (where there existed a purulent otitis media with perforation), and it was only by powerful inflation that any air could be made to reach the middle ear and the hearing be thus improved.

The subject of testing the hearing of deaf persons is one of much importance to the physician who would make a successful diagnosis. The ordinary means at our command are the voice, watch, tuning-fork, and rods of Kœnig. The disadvantage of the voice is, that in slight degrees of deafness, it is of little value, while the watch has but two variable tones, and the intensity of these tones is very slight, and the patient's estimate of the hearing is with difficulty controlled. The objection to the tuning-fork as an exact test of hearing is, that the intensity of the tone is not determined, as we are not always able to strike a tuning fork with the same force. Tuning-forks, like watches, vary, both in pitch and intensity. Professor Politzer has undertaken the construction of a uniform acoumeter, which has been tested, and is thus described by an accurate and accomplished aurist, Dr. Arthur Hartmann, of Berlin, in a paper on "Hearing Tests and Politzer's Uniform Acoumeter."*

Dr. Hartmann states that "as the measurement of the sensibility of a nerve must be an impulse of determined intensity, we must employ, for determination of the perceptive power of the auditory nerve, tones of a given intensity." Careful experiments in this direction were made by "Schalhänel," who made use of a ball falling from a certain height, as a sound source. "Itard" invented a pendulum acoumeter, which consisted of a freely suspended copper ring, against which a pendulum with a metal ball strikes. The elevation of the pendulum could be measured on a graduated circle, and the intensity of the tone be thereby determined. "Wolke," a German, employed as a sound source an upright sounding board of fire wood, against which a mallet of oak wood was allowed to fall through a given space. Various other instruments have been constructed to test the perception for tones of different pitch. Most of these instruments are too complicated and impractical to come into general use.

Politzer having undertaken the construction of a uniform acoumeter, has found such an instrument must possess, as will be seen from what is above said, the following qualities:—

1. "The construction must be more simple and the manipulation less complicated than in former acoumeters.

2. "The intensity and pitch must be accurately determined, and the instrument must serve as a test as well for aerial as for bone conduction."

Politzer's acoumeter "consists of a steel cylinder, four millimeters in diameter and twenty-eight millimeters long, set in vibration by the blow of a small hammer, also of steel. The cylinder is fastened vertically to a small column of vulcanite, the hammer being freely suspended from a slot in this column by means of a pin. The lever of the hammer projecting behind and beyond, the vulcanite column can be depressed to a certain point, and then liberated allows the hammer to strike the cylinder from a certain height, thereby insuring a certain intensity of tone. Two half rings being fastened at either end of the vulcanite column, the instrument may be held between the thumb and forefinger, the middle finger being free to set the hammer in motion. A small disk is also fastened to the vulcanite column by means of a pin, and is used for testing perception for bone conduction. The whole instrument is so compact that it may easily be carried in the vest pocket, and its construction is so simple that it can hardly get out of repair." The price is five and a half florins, Austrian currency.*

The Politzer instrument has met, in the first degree, the demands previously given. Those who demand of an acoumeter that it should include a larger number of tones will not be satisfied with it. The principal value of an acoumeter is to be found, not in the means of determining the perceptive power as a whole, but in detecting slight changes which may occur from time to time, under varying circumstances, or as a result of treatment.

In our knowledge of "Mastoid Disease" progress has been made by the investigations of Dr. Arthur Hartmann,† of Berlin, with the results of numerous operations on the cadaver; an abstract is here given also.‡ Three rare cases are reported by Dr. L. Turnbull, two successful and one post-mortem. In the first case it appears the Doctor, even in his early cases, which he reported in 1862, had acted on the same plan recommended by Dr. Hartmann. In the table published by "Burnett," see p. 545, opt. cit., he omits all the cases from 1862 to 1864, but a more complete and perfect account

* "Archives of Ophthalmology and Otology," p. 603 opt. cit.

* Optician Gottlieb, 12 Adlergasse, Vienna.

† Ueber die Perforation des Warzenfortsatzes von Dr. Arthur Hartmann, in Berlin, Separat-Abdruck, aus v. Langenbeck's Archiv, Bd. xxi, Heft ii.

‡ Transactions of Med. Society, State of Pennsylvania, vol. xii. Part 1, Collins, Phil., 1878.

will be found given by "Schwartze and Eysell," Archiv f. Ohrenh. Bd, 1, N. F., 1873. The same omission is made by Roosa in his fourth edition, and neither of these gentlemen, in their works, refer to Hartmann's investigations. A valuable monograph has been published by Dr. C. Miot, of Paris* (a gentleman who is well known by his contributions to the subject of otology), on "Tenotomy of the Tensor Tympani Muscle," and his conclusions on p. 41 are very favorable to the operation in relieving aural vertigo, tinnitis aurium, also certain forms of nervous deafness. The author gives a historical sketch, in which he gives due credit to Hyrtl, in 1874, as being the first who suggested the operation, and performed it in 1868. Then follows the numerous and careful operations of "Weber-Liel," of Berlin, Gruber and Franks, of Vienna, and he fails not to do justice to American operators, Dr. White, of Baltimore, Professor Calhoun, of Atlanta, Georgia, and Doctor Turnbull, of Philadelphia.

On April 27th, 1878, Dr. Laurence Turnbull delivered, before the class of Jefferson Medical College Hospital, a useful clinical lecture on "Congenital and Acquired Defects of the External Ear,"† Exostoses of Meatus, concluding by a description of a frequent but not well recognized disease, Desquamative Inflammation of the Auditory Meatus, and following "Wendt's" admirable description of its extension into the tympanum and mastoid.

A subject of special interest is that of "vertigo," which has been recently investigated by Dr. Woakes.‡ The phenomenon of labyrinthine vertigo, the one we are most interested in, an irritation of the inferior cervical ganglion, is due to disordered circulation in the labyrinth through the vaso-motor nerves of the vertebral artery. The labyrinth of the ear is supplied entirely from the vertebral artery, and discharges its veins into the superior petrosal sinus while the tympanum is supplied by branches of the carotid artery, and discharges its veins into the internal jugular. The bromide of potassium, sodium, calcium, and hydrobromic acid, as well as the hydrobromic ether, have the power of diminishing this vascular innervation and reducing the calibre of the vessels and the flow of blood. Dr. Woakes narrates several cases where the internal administration of hydrobromic acid has produced favorable results. In our experiments we can corroborate these good results, also the good effects of the hydrobomic ether,* both as a local and general anæsthetic, as well as in relieving those distressing subjective noises. These means should be employed to relieve the patient from the noises and deafness in connection with local treatment of the ears, which are very rarely free from some accompanying disease associated with the tinnitus aurium.

In the treatment of otorrhœa, Professor Gruber, of Vienna,† suggests some new methods of applying old remedies. In narrowing of the meatus he recommends pledgets of charpie, or bougies of laminaria smeared with simple ointment. In otorrhœa from inflamed drum membrane, he has employed an artificial membrane of linen applied to the inflamed membrane, covering the linen with ointments of oxide of zinc, red oxide of mercury, etc., in varying proportions; also, in cases of exudation and swollen tympanic mucous membrane, he employs "Hart's" gelatine globules, or wafers, prepared, as they now are, with sulphate of zinc, tannic acid, biborate of soda, carbolic acid, and nitrate of silver, in the varying proportions of from 1–10 in 100.

The subject of "Diseases of the Ear from Bathing" was first prominently brought before the profession at the International Medical Congress, by Dr. L. Turnbull, of Philadelphia, and a paper was read by him showing its importance, which, after an animated discussion, was approved of, and the discussion and paper were referred for publication. Only the paper was published, which was unfortunate, as much valuable experience was thus lost; but we are happy to state that Dr. Samuel Sexton,‡ of New York, took the subject up, and in a most thorough and complete manner has given the results in full to the profession. He shows the frequency of aural disease from bathing, both in salt and fresh water; how the ear is attacked, treatment, etc.

The same authority‡ reports a clinical lecture on "Accumulations which Obstruct the External Auditory Meatus," with the etiology, character of the accumulations, duration; also the symptoms producing irritation of the nervous apparatus of hearing, etc., with many new and interesting facts

* De la Ténotomie du Muscle Tenseur du Tympan. Par Le Dr. C. Miot, Professor of Otology, etc., etc. Avec 11 Figures dans le Texte. v. A. Delahaye et Cie, 23 Place de L'Ecole de Médecine. Paris, 1878, pp. 54.

† MEDICAL AND SURGICAL REPORTER, April 27th, 1878 (Philadelphia, D. G. Brinton, 115 S. Seventh Street), p. 327, No. 1104, Vol. XXXVIII, No. 17.

‡ *Lancet*, Feb. 9th, 1878. *British Medical Journal*, March, 1878.

*T ans. Med. Soc., State of Pennsylvania 1878.

† *Allgemeine Wiener Med. Zeitung*, Nos. 1 and 2, 1878.

‡ *The Medical Record*, vol. 13, No. 118. New York, May, 1878. Wm. Wood & Co.

‡ Practical Otology. Being a clinical lecture delivered at the New York Ear Dispensary, by Samuel Sexton, M.D. *Medical Record*, vol. XIV, No. 7. New York, August 17th, 1878.

in reference to an old, dry subject. It is sometimes difficult to introduce fluids charged with medicated remedies, and to overcome this, Dr. James Keene,* Aural Surgeon to Westminster Hospital, etc., has invented an instrument for an improved method of introducing fluid remedies into the tympanum, and published a small pamphlet, and has kindly sent one to the writer. As, however, our difficulty has been more in the introduction of the Eustachian catheter, not the fluid, on account of broken noses, etc., we cannot enter into the doctor's feelings, but will describe his instrument, which he illustrates by a drawing. It is a small vulcanite syringe, made to contain about fifteen minims of fluid; it has a capillary gold tube, through which the contents of the syringe are conveyed to the catheter, this is connected to an adapter which has an opening into the catheter and one downward into the fluid, like a spray arrangement; a tube enters the inflating arrangement to this lower opening, and a current of air in its passage over the end of this capillary gradually exhausts the fluid contents of the syringe, which are converted into spray before entering the tympanum. I have also received two practical pamphlets from Dr. Arthur Hartmann, of Berlin, two brief extracts from which I have only space to call to the attention of those interested in the subject, which have been translated and published in the journals.†

"The Treatment of Chronic Aural Discharges."‡ This subject I have already referred to, by "Gruber." In the pamphlet before us, of ten pages, taken up with matters well known (or should be) by the profession, washing out the ear with care, etc., the result arrived at in the Doctor's experiments is the discarding of his old remedy, salicylic acid and chalk, which a gentleman of Washington, D. C., improved by substituting starch instead of the insoluble chalk mixture, with the acid. Now, Dr. Chisholm has founded all his hopes on the oldest remedy known for otorrhœa, namely, alum, discarded long ago by the aural surgeon, because it produced abscesses in the ear. In his practice he states he has ceased to consider chronic aural discharges an obstinate disease; for, under thorough cleansing and the insufflation with alum or tannin, he finds they yield more kindly to treatment than any other bodily affection that has been of long continuance. Now, the best and most reliable authorities state that chronic otorrhœa is one of the most tedious affections they have to treat, no matter how careful or with what remedy they are treated, and it often requires months of treatment with various remedies.

The success of a special work* does not always depend upon its merits; it often depends on its author being a professor in a medical school; or on the bookseller, who is active and energetic, pushing his books into every available market, perhaps owning a journal, and watching with care the reviews of the work, that is placed in the hands of those who not only will do the book full justice, but overlook even mistakes and grave inaccuracies, so as to receive like favors for themselves; therefore, when a reviewer is called upon to review a work in its fourth edition (no matter how many the editions are in number), it is difficult to do it justice; still it is necessary, for the information of the general profession, that this should be done, else the review is of no benefit to them.

Now, the work before us is an electrotyped work, which is an objection to it, as changes are difficult and expensive to make; and when we compare it with the first edition, we find, with a very few exceptions of cutting out a little and adding a little here and there, that the work is the same as the first edition, except that portion on Diseases of the Internal Ear. To show that the author has not even gone carefully over it, as he should have done, we would refer to the prescription on page 305, where iodine is directed to be dissolved in a "half per cent. solution of iodine," instead of iodide of potassium, which was intended. The table on page 349 is also incorrect in its percentages, and the illustrations are a disgrace to the present advancement in drawing, coloring, and wood engraving, comparing it with our new medical works. The illustrations on pages 95 and 96 are simply disgraceful, both to the author and publisher. There are other matters which impair very materially the usefulness of the work; as, for instance, figure 13; it is entirely unfitted for the use of the student, to direct him where the tympanic membrane is to be sought for. In the second part, "Diseases of the Internal Ear," the latest views are not recorded with respect to the relations which the planes of direction of the semi-circular canals have to their function of enabling us to appreciate movements in the various directions; and M. Cyon's† observations of the relations of the otoliths in the ampullæ and the fluid of the semi-circular canals, to the periorbital muscles and

* Hardwick & Bouge, 192 Piccadilly, London, 1878

† Beitrag zur Lehre von der Ozäna. Schwerhörigkeit bei Kindern verursacht durch chronischen Nasenrachencatarrh, Berlin, 1878.

‡ Dr. Chisholm, Baltimore, Md.

* "A Practical Treatise on the Diseases of the Ear." By D. B. St. John Roosa, M.D." Fourth edition. Wm. Wood & Co., New York, 1878.

† Paris Académie des Sciences, Dec. 31st, 1878.

visual vertigo, which we have before referred to. Tinnitus aurium, which in his prior editions received no attention at his hands, has but little or no light thrown upon it, although it is alluded to under at least eight different heads. The idea is still maintained, that it is the result of an irritation of the acoustic nerve by the various morbid processes which affect the middle ear and labyrinth. He makes no reference to Itard, and other French observers, who teach that tinnitus is due to trophic affections of the fifth nerve, producing subjective sounds precisely analogous to those visual sensations in which the peripheric organ of sight takes no part. No mention is made of the investigations of Dr. Richardson*, of London, who calls attention, among the functional diseases from the abuse of alcohol, to subjective noises in the ears as one of the symptoms often present with alcoholic dyspepsia, muscæ volitantes, vascular changes in the skin, etc. These noises are caused, he says, by reduced vascular tension, especially of the internal carotid artery, and that he has known such complete and prolonged relaxation of the artery, that for months together it revealed one continuous murmur, compared to the sound of a torrent of water, or the grinding of a mill, or the whistle of a steam engine.

No notice is taken of "Gruber's" method of washing out the tympanum through the nostrils and Eustachian tubes, when the membranes are absent, which has been revived by Weber-Liel, and found so useful; and Weber recommends the cleansing the naso-pharyngeal space with weak solutions of bicarbonate of soda, while our author still adheres to the risky plan, according to his own showing, of using solution of chloride of sodium. We see no account of Gruber's method of making the patient pronounce the words, "hack, heck, hick, hock," for the purpose of inflating the middle ear, which is an effectual and pleasanter way than the old, swallowing of water, process.

(To be Continued.)

THOUGHTS ON MIDWIFERY, No. 2.

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When my former paper was sent to the REPORTER, it was my intention to follow it by another, on post-partum hemorrhage, suggested by the papers read before the society by Dr. Wilson, of Baltimore, and Prof. Penrose, of Philadelphia, and by the discussion to which they led. I now prefer to pass by that subject, and comment somewhat further on the lacerations of the cervix uteri and perineum which occur so frequently during labor. The opinion so boldly announced by several of the eminent men who participated in the discussion, and who, I may add, were nearly all teachers, "that the use of the forceps was not so likely to cause bad results—such as the lacerations referred to—as the allowing the labor to continue its natural course," though delivered by "those having authority," was not new to me; for I had heard it time and again from lips of young graduates, fresh from the colleges in which those professors teach. All over the State we have practitioners of only a few years' standing who talk as flippantly—I should have said as authoritatively—on the subject, as do the teachers whom they so reverently follow. It does not seem to have occurred to them that a teacher of midwifery may be in error, or ride a hobby too long and too hard, and lose his way. There are, in all great cities where medical colleges are located many practitioners of medicine who are as experienced in midwifery and as skillful in all its branches as the professors in the colleges, who often furnish valuable essays to the medical and obstetrical journals, but their writings fail to make much impression on those who have recently received instruction at the colleges. They regard their "old Professor" as the highest living authority; his practice as the embodiment of the advanced, orthodox practice of the times. How great, then, is the responsibility of those who train young men, hundreds of them annually, to go forth as aids to those who are to suffer the perils of childbirth. I am well convinced that the teaching of midwifery in our medical schools during the last ten years has been of a kind productive of disastrous results, and it was, therefore, not pleasant to discover that a number of the prominent men of the society of which I have spoken were deeply indoctrinated with the belief that the womb is a very inefficient and wayward organ, which can rarely be confided in to effect delivery; "that it is cruel to let the woman suffer," and that the forceps are safer than nature. And here allow me to say that those who held this belief were, almost without exception, teachers of medicine. No wonder, then, that the very air of our State is filled with it.

Since I last wrote I have been present at an operation by Dr. Goodell, at the University Clinic, on a poor woman who had suffered for several years from ulceration of the cervix uteri. What she had suffered during those years no one not thus afflicted can imagine. Would that every man who practices midwifery could read the graphic description of such a patient's condition,

* Diseases of Modern Life.

given by Dr. Goodell in his address on Obstetrics, before the State Medical Society, and published in its Transactions for 1878. If, after having read that paper, he could, in his subsequent practice, "hurry up" a labor, to save time to himself, or through a desire to see whether he could "effect forcible dilatation" and "deliver at the superior strait," or from fear of convulsions or hemorrhage, then he would prove himself unfit for his calling.

I have intimated that the unnecessary meddling with cases which are progressing in a natural way, by using various means to dilate the mouth of the womb, and then to urge the uterus to more powerful contraction by the use of medicine, or to resort prematurely to the forceps, is the main cause of lacerations of the cervix uteri and perineum. Is there good ground for this belief? In the address of Dr. Goodell, already referred to, he says: "The cervix uteri often gives way during labor, far more frequently than it ought, far more frequently, indeed, than it would, were nature allowed to take the lead. In these busy days there is unfortunately a tendency to urge on labor, more, I fear, for the sake of the physician than for that of his patient. The means used for this purpose are early rupture of the membranes, administration of ergot, and use of the forceps before the os uteri is dilatable." I might quote, to the reader's advantage, the much more that he has on this subject, but let this suffice.

In looking over the report of Lycoming county, published in the *Transactions*, I find the following from Dr. G. D. Nutt, of Williamsport. "Within the past six months I have been consulted in four cases of ruptured perineum. In two the sphincter ani was involved, giving rise to periodic diarrhœa. One of these cases was treated, during six months, by her physician. The case was cured by an operation. The other case has been suffering for five years, and was attended for two years by her physician without suspecting the cause. The amount of suffering this woman had endured, to say nothing of her uncomfortable and disgusting condition, is enough to awaken the sympathies of the most indifferent."

Such is Dr. Nutt's published report. Four cases within six months, in a mere country place; and they suffered greatly. Now, were these unavoidable lacerations? I think not. If the mother had been let alone, not interfered with by a meddling doctor, who had been taught that it was cruel to allow a woman to suffer the pains of a natural labor, that the labor could be shortened, many hours, by forcible dilatation of the os uteri, or by the application to it of belladonna, or by flooding it with hot water and then resorting to the use of the forceps, even though it were "high up," there would most likely have been no lacerations. But this is only my supposition. To learn the facts I wrote to Dr. Nutt, and he kindly sent me this answer: "I am happy to give you the desired information. In two of the cases *the forceps were used, and were, I think, the cause of the trouble;* for, from the patient's testimony, the doctor was in a great hurry, and hurt her very much. Of the other two, one was given ergot, and the other was given ergot and the forceps used too. Since writing the report another case has fallen into my hands, caused by the use of ergot. In writing of these cases I will not omit a case of my own which happened to me some years ago, in my earlier practice, and which opened my eyes to the danger of using the forceps. In order to deliver the woman quickly I used the forceps, and thought my labor over, but after four weeks' attention I made an examination and was surprised to find an extensive rupture of the perineum; although the case has been partially relieved by an operation, yet I have never forgotten the lesson I learned through bitter experience."

Such is the statement of Dr. Nutt, and it really seems to make positive what with me was only supposition, namely, that these four women were maimed for life because of a meddling doctor, or doctors, who were in a hurry. I have no words to express properly my contempt for the doctor who would endanger the life and destroy the health of a woman in her hour of peril because he was in a hurry; so, for the present, will let it pass. But what have we here, from a single physician of a small town, where there are several other physicians, probably quite as eminent, and as likely to be resorted to for the relief of such injuries? Five cases of laceration of the perineum in a few months. If the others could make like reports how numerous must the cases be in a single county. And what the cause? Meddling. Not one of the six was unavoidable. The doctor, in a hurry, disregards the fact that the time for interference has not arrived, and reckless in relation to what might happen to the mother and the child, commits an act on which he plumes himself as having proved his ability to shorten the duration of labor many hours, which his teacher had told him might be done with greater safety to the patient than if she were allowed to depend on the slow, painful efforts of the womb.

This statement from Dr. Nutt almost frightens me. It is far worse than I had believed the facts to be, and yet it probably does not come up to the whole truth, for it speaks only of laceration of the

perineum, and if we could follow that hurried doctor, and ascertain the extent of the injuries which he has inflicted, we would probably find that in addition to the injuries to the perineum, the cervix uteri had oftentimes suffered. We would no doubt be able to discover that some patients had died after confinement, from peritonitis, the result of laceration of the cervix uteri, an injury which he had not suspected; for Dr. Goodell says, "If union of the lacerated cervix should not take place, dangerous inflammations will occur." This injury is rarely suspected by the accoucheur, and yet so frequently does it occur, that one writer states that of the women who apply to him for treatment of uterine disorders, forty per cent. exhibit lacerations of the cervix uteri; and our own Dr. Goodell "infers that about one out of every six women suffering from uterine trouble has an ununited laceration of the cervix; and as an evidence of its frequency I may add, that I have operated for this lesion eighteen times within the past twelve months." I pause a moment, to say that this address by Dr. Goodell, which is hidden away in our "Transactions," should be published in every medical journal on the continent, as a warning to doctors against haste and recklessness.

If the disasters to which I have alluded are the results of erroneous teaching, and if the experience of Dr. Nutt and Dr. Goodell are true indications of what are occurring all over the land, who can compute the number of lacerations produced annually, or have a just conception of the amount of suffering entailed on the women of Pennsylvania by erroneous teaching? I say erroneous teaching, for do not we follow masters—masters teaching in New York, Buffalo, Philadelphia, Baltimore, Boston, etc.? We distrust nature; we fear that we may wait on her too long, or that "something is wrong," or that "the woman is being worn out;" and, deeply impressed by the teaching that the forceps are easier, safer and more efficient than the natural forces of the patient, we resort to them hours before an experienced practitioner would consent to use them.

Teachers are prone to lay down positive "rules," and to so magnify the dangers of any departure from a rule, that young men are all the time on the watch for diasters. An example of this was given during the discussion in the Society, when a professor "regarded the most important point in Dr. Emmet's paper to be his statement with reference to the exact time when the forceps should be used, and that was immediately when the head ceased to recede after the occurrence of a pain. n that respect the time was definitely fixed, and was a most practical teaching. A delay of fifteen minutes at that time was *dangerous*, and the patient was placed in the *greatest peril* unless delivery was speedily effected." What other accoucheur, of even ordinary experience, would be willing to say that the woman was then in the greatest peril? If in so great peril in fifteen minutes, was she not in peril in ten minutes? Why wait at all? A young man thus taught would feel it to be incumbent on him to be constantly on the watch, to feel every pain and determine positively whether the head receded or did not. He thinks it does not recede; he is alarmed; he remembers the words of his teacher, "the woman is in the greatest peril," and then, in all haste, regardless of the condition of the patient, who is unconscious of danger, and exhibits no sign of sudden change—indeed, of any change at all—proceeds to deliver speedily; a delivery which, in the hands of a skillful, well-practiced man might terminate well, but which, in the hands of a frightened, inexperienced one, would likely result in a laceration of important tissues.

Let us suppose, now, that the declaration alluded to had been made in that meeting by any one there not a professor, say by Dr. Ellwood Wilson, or Dr. Albert Smith, or Dr. Goodell, any one of whom is equal in skill and experience to the author of it; in that case it would have worked but little mischief; the few persons present were men able to put it face to face with their experience, and to decide on its value; and after that it would have been hid away in an obstetrical journal, perhaps, and would have reached scarcely one in a hundred of the physicians of our country. But not so when it is the utterance of a teacher of hundreds of young men. What was said in that meeting will be impressed on the minds of these coming doctors, most emphatically, in his course of lectures this winter, and they will carry it with them into every State in the Union. If it be true that danger so imminent threatens the patient, and that to use the forceps at once is her only safety, then it is well. If not, then no one can measure the extent of injury wrought by it.

My experience, in cases which are numbered by thousands, is not in accord with that declaration, and it was, therefore, pleasant to know that Dr. Barker, of New York, "regarded it a very uncertain rule to resort to the use of the forceps when, in the interval of uterine pains, the head ceased to recede."

It would seem, from what I have written, that I am wholly opposed to the use of them. I am not. To me they are of inestimable value, and I incline to the belief that, even in Dr. Nutt's cases, a skill-

ful man, not in a hurry, might have used them without doing harm; and yet, very likely, nature could have done it better. In my next paper, on Post-partum Hemorrhage, I hope to show that professors of midwifery, not alone of this or that particular school, impress so strongly on the minds of their students that fearful perils environ the lying-in woman, and attend every step of the labor, that they are, through fear for her safety, impelled to interfere with even the most natural and safe ones.

CASE OF EXTRA-UTERINE PREGNANCY.

BY FRANKLIN HINKLE, M.D.,
Of Columbia, Pa.

I was called, June 23d, 1876, to visit Mrs N. C., of Marietta, Pa., aged twenty-three years, married one year, who I found enceinte and laboring under violent peritonitis, the result of right tubo-ovarian pregnancy of four months.

She became pregnant about the middle of February. At this time she witnessed an accident to a young man of her acquaintance, who was killed on the railroad, in front of her door. After this she experienced a great nervous shock, giving rise to a slight catamenial discharge, and from that time until I was called in she had been more or less indisposed. With proper treatment peritonitis was allayed, and she recovered, July 10th. My diagnosis was based upon the following facts: Patient had a slight sign of the catamenial period. After this she did not menstruate, but had, at irregular periods, a reddish, watery, vaginal discharge. Her digestive organs were very much disturbed by nausea, and an immoderate appetite for indigestible food, and she had a special longing for lemons. Thus the first two months passed, with the usual sufferings attending pregnancy.

In April, May and June, and at last weekly, she would be taken, in an instant, with excruciating colicky pains in the region of the right ovary. A fixed point, as she said, for the pain seemed to come from a spot not larger than a silver dollar, and continued for hours, and sometimes for days. The bowels now became constipated, never moving except by purgatives or enemata, and she suffered for some days the most excruciating pains in micturition, which were relieved by hypodermic injections of morphia and atropia.

The gradual enlargement of the breasts and the discoloration around the nipples were found to correspond with the pregnant condition. In the latter part of summer the breasts became filled with milk.

Examination showed the uterus enlarged to the size usually found at the third month, but high up, and it was with difficulty that the os could be reached with the index finger. The vaginal wall was pressed heavily forward to the right, by a large sac filling up the entire right sacro-iliac fossa, and dipping deep into the pelvis. The right and external wall and inferior part of the sac were firm, and of a doughy feel upon pressure, while the anterior superior wall was thin, as though nothing but the wall of the vagina interposed. The contents of the sac could be distinctly felt, and in August I was positive that I could feel the head and extremities of a fœtus. This, with the pathognomonic signs—the sudden colicky pains in the right ovary, with the bloody, watery discharge; the enlarged uterus filled with the membrana decidua, while the right side was filled by the fetal tumor; breasts enlarged and filled with milk, comprised my cautious, though positive diagnosis, given in the fifth month of her pregnancy.

August 29th, on account of exposure, she had another slight attack of peritonitis, from which she recovered September 7th, and from which time I did not see her again until November. Nov. 20th she was taken with labor pains; had natural discharges from the uterus, of liquor amnii, which was tinged with blood. After suffering all night she was seized with violent spasms.

Prior to this, through the months of August, September and October, she had felt the movements of the fœtus, but after the spasms they ceased. I then strongly advised the family as to the propriety of an operation, but without success. January 1st, 1877, she was again seized with a chill and peritonitis.

Her family physician attended her up to the 17th instant, when I was again called. I found her with a dead fœtus in the abdominal cavity and suffering from peritonitis, which continued up to February 1st before it was checked.

During this month she lay in a prostrate condition, suffering from diarrhœa, and discharging feculent, mucoid matter, due to the discharge of portions of the dead fœtus. Her constitutional symptoms were very grave. She was extremely emaciated and in a cachectic condition, with very feeble pulse. Although orders had been left that all fecal matter discharged should be kept for my inspection, I found that several evacuations were thrown out without my seeing them.

March 3d, she passed a large fleshy mass, together with the left femur, which dropped into the chamber, and first called the notice of the nurse to the fact.

Three days later I visited my patient, prepared to operate, but found that she had had a chill

during the night, followed by a heavy, cold perspiration, with feeble pulse, which continued for nearly twenty-four hours. I, therefore, deemed it imprudent to operate, and was compelled to use powerful restoratives to resuscitate her.

March 10th. She passed, per rectum, the iliac bones, sacrum and seven lower vertebræ, with the intestinal tube and thoracic viscera, *en masse*.

The following day she appeared better. Sp. gr. of urine eight below normal, pulse 89, soft and compressible, and appetite improved. The remaining fetal bones could be distinctly felt through the abdominal parietes, and fearing another attack of peritonitis, I performed the operation of gastrotomy March 12th, at 11.30 A.M., assisted by J. Agustus Ehler, M.D., of Lancaster, and my student, Mr. Houston Mifflin.

I considered the operation of gastrotomy necessary, for the reason that the greater part of the fœtus had passed through the abdominal canal, and therefore, thought there must be a fistulous opening through the rectum, and very probably I would find the remainder in the abdominal cavity, as the bones could be distinctly felt, and I believed her past sufferings were all owing to this cause.

An incision was made, five inches in length, through the linea alba, from the umbilicus downward. I found the peritoneum much thickened, and considerable serum escaped from the incision. In the ascending colon were a number of bones lying obliquely across the canal, which acted as a barrier, preventing any rectal discharge, and no portion of the fœtus remained in the abdominal cavity; all had found their way into the intestine, and the fistula was closed. I then requested my friends to make an examination, and they concurred in my opinion. I thought I would not be justified in opening the intestine, so, after separating the bones along the intestine, I closed the wound. She rallied after the operation, had no inflammation, and the parts healed kindly. March 13th, she passed a comfortable night, suffered less pain than before the operation, no fever, pulse good, stomach weak and only able to take liquids.

The remaining bones did not pass per rectum, and could not be detected afterward. I regret now that I did not open the bowel and remove them.

Patient made a good recovery from the operation, but on the night of the eleventh day after the operation she had a violent chill, with fever and sweats.

On the 13th day she vomited and spat purulent matter. It was a septicæmic abscess of the lung which caused death, about eleven days after the operation.

My patient should have let me operate soon after her recovery from the labor which left the fœtus free in the abdominal cavity. The case was of the tubo-ovarian variety of extra-uterine pregnancy, from the fact that the liquor amnii passed off per via naturales, with hemorrhage, and I think that the shock she sustained from the fright, occurring at the time the ovum was on its way to the uterus, induced a spasm of the tube and detention of the ovum. Hence the cause of the abnormal pregnancy.

Hospital Reports.

PHILADELPHIA HOSPITAL.

CLINIC OF DR. JOHN H. BRINTON, DECEMBER 14th, 1878.

REPORTED BY DR. W. M. ANGNEY.

Sprains.

GENTLEMEN:—I wish, this morning, in the first place, to invite your attention to the subject of sprains. These injuries, as you know, are exceedingly frequent, and are rather lightly regarded by the community. "It is only a sprain," is a common expression, and a sprain is considered as scarcely deserving of sympathy; and yet, gentlemen, I can assure you that a sprain is sometimes a most serious matter, involving not only present suffering, but often followed by chronic lameness and wearisome impairment of the function of the parts. I use the word wearisome designedly, for, indeed, it applies not only to the patient, but to the surgeon also. Recovery from a bad sprain is at times painfully slow; the sufferer loses heart, and may be almost pardoned if now and then his faith in his professional adviser be shaken.

Now, gentlemen, what is a sprain? It is essentially a strain, or wrenching, or twisting of the tissues which surround a joint, involving alike the ligamentous fibres, the fibrous capsule or involucrum, the tendinous cords, the synovial prolongations and sheaths, and I suppose also the muscular structures, where such exist in the neighborhood of the articulation. The sprain may involve some or all of these tissues, and may vary in degree from the slightest abnormal stretching up to laceration and divulsion of the parts. You all know the characteristics of a sprain, and I am sure I need only refer to such an experience as an ankle "turning under you" to bring vividly to your minds the salient points of such an injury.

The first and most prominent of these symptoms is pain. This varies in degree, according to the amount of violence and the nature of the joint. The sprain of a tight, compact joint, such as a hinge joint, is greater, ordinarily, than that which is experienced in a like injury of an orbicular joint, and you will readily understand why this should be so. The tighter the tissues, the more tense they are normally, the more will they be stretched and lacerated by a given amount of force. On the other hand, the looser they are, the greater the degree of normal motion in every

direction, the less likely is lesion of the joint structures to happen. Thus it is that the hinge joint suffers more than does the ball and socket joint. The pain of a sprain, therefore, varies; it may be very slight, or it may be intense, almost unbearable. Oftentimes it is of a nauseating character, especially, I think, when the violence has fallen upon lateral ligaments.

Another symptom is the swelling which accompanies a sprain. If you examine a joint, say an ankle joint, immediately after such an accident, you will find that there is good deal of extravasation. Blood has escaped freely into the tissues below the malleoli, and the parts are puffy and discolored. In a little while effusion of serum occurs, the front of the ankle and the dorsum of the foot become infiltrated, and the skin appears tense and shiny. Impairment of motion is another symptom of the injury. You would naturally expect that this should be so, as an accompaniment or sequence of the symptoms just referred to. The joint is usually very tender, and immovable; that is to say, the patient cannot move the articulation; it hurts him to do so, and therefore, he will not. Nevertheless motion is there, and may be developed by the surgeon's manipulation, either with or without the administration of ether. This is an important point, and must not be overlooked in arriving at a differential diagnosis as to the existance of sprain, fracture, or luxation.

What is the treatment of sprain? The first duty of the surgeon in such a case is, of course, to establish his diagnosis. If necessary, as I have just said, anæsthesia may be demanded. The sprain, however, once determined upon, the treatment may then be divided into the acute and chronic. The usual and prominent features in the former are, rest, and the antiphlogistic applications of cold water, lead water, lead water and laudanum, and other like local agents. They are all very good, and you will find them very useful. But there is one application which I will tell you of, and recommend to you; it is the use of hot water. I do not know that it is particularly new, but I am sure that it is not in as general use as it might be. A good many years ago I was, one morning, passing a theatre, where, standing on the steps, I saw that most excellent surgeon, since gone, Dr. Paul B. Goddard. He called to me, and asked me if I knew how to treat a bad sprain, adding, "come in, and I will teach you something." I went in, and then found that a star foreign actress, a large, heavy woman, had just turned her ankle, was suffering greatly, was unable to take her part in rehearsal, and it was feared would not be able to sustain her rôle in the evening's performance. Dr. Goddard directed her to place her foot and ankle in a bucket of hot water, when more hot water was slowly poured in from a kettle, until the highest endurable temperature was reached. The limb was then retained in position for some fifteen minutes, the pain gradually decreasing until it passed away. As the pain vanished, the motion returned, and the lady was enabled to play her evening's part without a limp, and without pain. This case made a great impression on my mind, and I tell you the anecdote for the sake of the moral contained, viz., the early use of very hot water in sprains, particularly of the ankle joint.

Unfortunately all sprains do not come to such a speedy and satisfactory termination. In many cases the tendency is to become chronic. The case lingers on; if it be a sprain of the ankle or of the knee there may be entire comfort when the part is at rest, but a recurrence of pain on walking. Or, in some cases, the patient may be able to walk for a little while without material inconvenience, and yet find, later, a return of shooting pains. Or, again, partial motion of the joint only may be present, extreme flexion or extension being accompanied by suffering. What does all this mean? Simply this, that a secondary inflammation, to a lesser or greater degree and extent, has taken place, and the indication of treatment must be found in rest; not occasional, spasmodic rest, at the patient's option and caprice, but *absolute rest.* In my own experience I have found that this can be best obtained by the application of a permanent dressing—the starched bandage, the gutta percha splint, or the silicate of soda dressing. In ordinary cases I prefer the latter. The gutta percha splints are expensive, and are apt to become brittle and crack. The starched bandage takes too long to harden. The silicate of soda seems to me almost perfect. I use it very frequently, and I will now show you how it is to be applied.

Here is a patient who some time since fell and sprained his ankle. Immediately afterward he had all the symptoms I have described, and he has been confined to his bed for some weeks. The strictly acute symptoms have, however, now passed away, but, as there is yet some lingering tenderness and pain upon motion, even when effected passively, I have determined to put the part at rest by the use of the silicate of soda dressing. Notice how this is made. I first apply a roller bandage from the toes to the knees, and over this I paste, if I may use the word, a series of short strips of bandage, or muslin, saturated with this solution of the silicate, until the whole limb is surrounded with a coating five or six layers thick. Over the whole I then apply another dry roller, and allow the dressing to dry, which it does in fifteen or twenty hours. When the apparatus shall have become firm and solid, I shall cut it down the front of the leg, with these strong pliers, made for the purpose, and take it off. I shall then bind the divided edges of the splint with a silicate strip, and run a single strip up the inside, to prevent the reverses of the first roller from being displaced. The splint will look like this one on the table, which was removed some time since, from a patient in private practice. What use will I make of this splint when once it is finished? Just this; I shall have it applied by an ordinary roller bandage; let the patient walk, at first with crutches, and afterward with a cane. I shall direct this splint to be removed daily, the limb douched with cold water, and then the splint reapplied. He will easily manage all this himself, and will soon become very expert in the management of his leg. This treatment will be continued as long as there is any tenderness around the articulation. The object of my endeavors is to enforce perfect rest of the joint until the chronic inflammation and effusion shall have disappeared, and this is the only secret of the treatment. If at any time, in following out this plan you should detect any tendency to unusual stiff-

ness of the joint, you should make gentle passive motion daily, or, if you choose, you may direct the systematic massage which has recently been so much resorted to in chronic surgical troubles, and which at times almost seems to work wonders.

Erysipelas.

I will next bring before you two patients suffering from erysipelas. The first of these is a laborer, thirty-eight years of age, Irish, and unmarried. He tells us that he is a sober man and not addicted to drink, at all events to any excess, and that he has recently been working very hard, on the railroad. During this time he says that he has been exposed to cold, but that he has received no fall, or other mechanical injury. Yet he is evidently suffering from serious trouble; notice, if you please, his face and scalp. You see that they are greatly swollen, his face is dusky red and distended, pitting upon pressure; and the tumefaction involves the upper and lower eyelids of each side, so as almost to close the eyes. The palpebral conjunctivæ are inflamed, with purulent secretion. The lips are greatly increased in size, and so, also, are the ears. On the latter the skin is tense and shining, the lobule is enormously swollen, and the integument of the concha almost occludes the opening of the external meatus. On portions of the face you may notice little vesicles; in some spots they have burst and the torn cuticle forms small, rough eminences on the inflamed skin. His condition is feverish, his temperature is high, varying from 102° to 103°, and he complains of a burning sensation over the affected parts. His intellect is clear, and he answers rationally questions put to him. He can assign no cause for his trouble; he attributes it to cold and exposure, and he has not been near any one similarly affected. Now, what is this disease? Manifestly erysipelas, of the œdematous type.

Here let me say a few words to you concerning erysipelas, for it is one of the diseases too frequently met with by the surgeon, and, as you can readily imagine from the appearance of the case before you, is one well calculated to excite alarm in the minds of a patient and his friends.

Erysipelas is usually defined to be an inflammation of the skin, involving to a greater or less extent the subcutaneous tissues, and with a marked tendency to extend and spread rapidly. The disease may present itself as simple erysipelas, when the inflammation is confined to the skin proper; œdematous erysipelas, when there is marked effusion of serum, as in the patient before us; and phlegmonous erysipelas, in which the cellular and fatty tissues are largely involved, with a strong tendency to suppuration. Another classification is into idiopathic and traumatic erysipelas. The former arises chiefly from constitutional causes, while the latter is the result of local disturbance, following operation, injury, or open wound.

The constitutional symptoms of the affection, when severe, are sufficiently pronounced. Fever, oftentimes preceded by chill, a coated tongue, becoming dry and brown as the disease advances; a temperature running up to 103° or 104°, and disordered intestinal function. Usually there is constipation, occasionally diarrhœa. The urine is high colored and diminished in quantity, and frequently albuminous. The pulse is mostly quick, and at times irregular. In severe cases, especially of the head, delirium is present, and is an unfavorable symptom.

The treatment necessarily depends upon the gravity of the cases. In the patient before us, the affection has, I think, reached its acme, for I observe here and there little wrinkles forming in the skin, showing that the tumefaction is on the decrease. He tells us, too, that he is better than he was yesterday, and that the burning and heat of the part is not so great. I shall order for him a simple treatment; the part will, for the present, be covered with a cooling lead water and laudanum solution. Later in the case I shall, probably, order an application of the oxide of zinc. Internally, he will take the muriated tincture of iron, twenty drops four or five times a day. This preparation is, I think, the one most to be trusted in the treatment of erysipelas, and there can be no doubt that it exercises great influence over the progress of the disease. To be of service, it ought to be freely administered. The only difficulty I have met with in its exhibition is its tendency, at times, to disagree with the stomach, and to excite distress and prolonged nausea and vomiting. In such cases its discontinuance is unavoidable, unless, by combination with gentian, quassia, or some other bitter tonic, its presence can be tolerated by the stomach.

The administration of quinine, to the extent of ten or twelve grains a day, is also a matter of importance in this disease; so, also, is the diet. The old idea of starvation and a low regimen is no longer entertained; on the contrary, the patient should be supported by the best of nourishment the stomach will bear—milk, beef essence or tea, and stimulants as required, in the form of milk punch or otherwise. Personal cleanliness, and thorough ventilation of the room or ward, are, moreover, matters which should be carefully looked after. The absolute necessity of isolation of an erysipelatous case is much insisted upon. It is usually stated that there is always in this disease a tendency to infection, and unless the patient be strictly secluded, and kept apart from others, much mischief may accrue from the spreading of the disease from bed to bed. For my own part, however, I am inclined to doubt, whether in civil practice, and in hospitals under proper hygienic regulations, such is the case, at all events to the extent supposed.

The prognosis in a case of simple or œdematous erysipelas is not usually grave. In the phlegmonous form, however, especially if the head be the affected part, the reverse is the case. Great danger here may arise from the extension of the inflammatory condition to the brain or its membranes. In phlegmonous erysipelas the accompanying suppuration is often wide spread, and exhausting to the patient's strength. It must be met, and met promptly, by free openings and incisions, to further the escape of the purulent matter, and by a judicious use of disinfecting agents, such as Labarroque's solution, solutions of carbolic acid, and the employment, when there is much destruction of the superficial tissues, of light charcoal or yeast poultices; of course, in such cases, there is an increased drain upon the system;

and therefore a proportionate necessity for constitutional support and stimulus arises.

In the light case of the œdematous form of the disease which I have brought before you this morning I shall confine my treatment to the simple remedies I have indicated in his case, and I doubt not that I shall bring him before you at my next clinic materially improved, if not, indeed, entirely convalescent.

Here is another case of erysipelas, of the phlegmonous variety, a graver form of the disease. This man tells me that he is about forty years of age, that he is a hard drinker, given to periodical excesses, and that he has recently been on a debauch. On coming to his senses he found that his leg had been excoriated or scratched, just above the ankle, as he thinks, by a torn boot. Observe, now, the condition of the limb; it is enormously swollen, in fact, it is twice its natural dimensions. The skin is intensely injected, some of the vessels are of large size, and present an arborescent appearance. The heat of the part is much increased, and I can readily detect the difference in temperature between the two limbs. When I press on any part of this tumefied surface it pits, and the redness disappears, but on removing my finger both color and swelling return. On pressure the whole part feels boggy, and I am sure that the inflammation involves the superficial fascia, and probably has extended along the intermuscular cellular planes. The case is one of true phlegmonous erysipelas, and I am certain that suppuration is being established beneath the integument.

The constitutional symptoms in this case are pronounced, but not to the degree you might anticipate looking at the local conditions. There is some pain, not a great deal; fever, with a dry skin, coated tongue, increased temperature, and scanty, high-colored urine. He complains of inability to sleep, but the ward nurse says he sleeps very well.

What shall I do with this case? In the first place, I must relieve the local tension, and let out the pus. I will make an incision, and as I do so, you observe the flow of thick pus, and the puffing out of the disorganized tissues. I shall have the limb poulticed, and the poultice changed every two hours. Internally I shall direct twenty-five drops of the muriated tincture of iron every four hours, and give him fifteen grains of quinine in the course of the twenty-four hours. At night, if there is insomnia, he will take an old opium pill, one grain, to be repeated if necessary. As for his diet, I shall give him, as he can take it, the most nourishing food the house affords. If he has any difficulty in taking solid food, I shall order him milk. I have a high opinion of the milk diet when there is gastric irritation. In urethral fever, I have for years made use of it, and in urinary diseases generally; and after operations in the genito-urinary organs, I have found it of the greatest service. I do not doubt that this case of phlegmonous erysipelas will do well, unpromising as the appearance of the limb is just now, and I base my prognosis upon his present constitutional state. * * * * *

—We would remind subscribers that at the first of the year the annual subscription falls due.

Medical Societies.

THE RHODE ISLAND STATE MEDICAL SOCIETY.

The quarterly meeting of this Society was held December 18th, the President, Dr. E. T. Caswell, presiding. The President announced the death of the oldest Fellow of the Society, Dr. S. Augustus Arnold, in a few appropriate remarks.

Dr. Turner, of Newport, made some remarks in regard to the attendance of physicians as witnesses in courts. He thought that some action should be taken to provide a law, if possible, by which courts could have discretion to allow a reasonable compensation, as is done in other States. In the present state of the law in Rhode Island, it frequently worked great hardship in compelling long attendance with no adequate pay.

The report of the Committee on the Adoption of the Metric System was read by Dr. J. W. Mitchell. It favored the adoption of the system, and closed with the resolution that on and after January 1st, 1880, the Rhode Island Medical Society would use it in practice.

Dr. Williams, of Boston, was introduced to the Society. He made some remarks in regard to the institution of the Board of Medical Examiners recently established in Massachusetts, to have charge of cases requiring their services in connection with coroner's inquests, and expressed his pleasure in being able to meet with his friends of the Rhode Island Medical Society.

Dr. H. G. Miller, of Providence, gave an informal essay upon the treatment of nasal pharyngeal catarrh, which was followed by discussion and suggestions by several physicians.

Dr. Virgil D. Hardon, read a paper upon mechanical dysmenorrhœa, which was followed by discussion.

DIPHTHERIA.

Dr. O. Whitney, of Pawtucket, read a carefully prepared essay on the subject of "Diphtheria." He quoted largely from prominent medical authorities in support of his conclusions as to the cause and treatment of the disease, which were presented, as follows:—

1. There is but one pseudo-membranous disease.
2. It belongs to the same family with influenza, which may, by the same nomenclature, be called the mucous disease.
3. Both are inflammations of the same anatomical structure, *i.e.*; the mucous membrane lining the nares, throat and primary passages to the lungs.
4. The "flux," or product in influenza, is innocuous, and not capable of self-propagation.
5. The "flux" in the pseudo-membranous disease is concrete and raised to morbid specificity, or having self-generating powers.
6. Both branches of this family of diseases have prevailed from time immemorial, and are governed by the same general causes and influences, and modified by the country in which they may have prevailed and individual habits of the people.
7. It is contagious or infectious in proportion to its visible putridity in individual cases; the infecting power being of short duration. This self-

generating power lies in both the breath of the sick, and in the more solid discharges from the affected surfaces. "There is no evidence that, as constantly happens in scarlet fever, the active contagiousness of diphtheria extends to a period of convalescence at which the accustomed duties of life can be resumed." There are some animal poisons which are known to increase in the severity of their action by successive inoculations, and to this class it seems probable that the infectious matter of diphtheria may belong.

8. As in influenza, one attack of the pseudo-membranous disease gives no protection against a future attack.

9. Both branches of this family of diseases have had a great number of names.

10. In New England it has borne bad names among the laity, when in the concrete; membranous croup and "putrid sore throat." In the profession membranous laryngitis (cynanche trachealis, obsolete since 1830), and cynanche maligna.

11. When prevalent in the fluid branch, it has generally been known by the Italian word influenza, or influence. For some transient reason it was known as the "Tyler grip" in 1842.

12. It is primarily a local disease, and its immediate effects in the pseudo-membranous branch depend upon severity and locality invaded. The remote results depend upon absorption of the decomposed concrete flux, or membrane.

13. The remote results have a constant relation to the quantity of absorption, which takes place from the throat, little if any being absorbed from the larynx and parts below.

At the conclusion of the reading, President Caswell announced that, owing to the lateness of the hour, there could be no extended discussion upon the thoughts deduced by the essayist.

Editorial Department

Periscope.

Digitalis in Heart Disease.

We quote some further views of Dr. J. M. Fothergill on this subject. They are from a late address. He said he had used it largely and never seen accumulative effect, and had found no evidence of such. The only fear was of producing acute poisoning at the time. He had seen it produce hard hammering action of the heart; measuring its effect by the frequency of the pulse was exploded. Digitalis increased the force of the ventricular contractions by its effect on the nerves. As Niemeyer said, it filled the arteries and emptied the veins. In dilatation with frequent imperfect action, it reduced the rapidity of the pulse. Dr. Balthazar Foster found retardation of the pulse one of its effects. In aortic stenosis the hypertrophied heart compensated. Digitalis was especially of use in dilatation of the heart. One patient was taking at present twenty-drop doses of tincture. If there were fear of the muscle failing, a little strychnia might be added. In feeble, irregular rhythm, it might be given without fear. In mitral disease it was useful, and was given to act on the right side of the heart. There was no difference as to its use between mitral obstruction and regurgitation. It was especially useful in the bronchorrhœa of mitral disease. In aortic stenosis it was rarely necessary to give it till the later stages. In aortic regurgitation it was not desirable to give it unless exceeding dilatation existed. When the patient lay in bed in hospital, small doses sufficed; but when up, larger doses were required. Individual peculiarities and the mode of preparation of the digitalis must be borne in mind. In organic diseases digitalis was of use; but in functional disorders it did no good. In chorea and in Grave's disease bromide of potassium with belladonna was better than digitalis. In palpitation with chronic Bright's disease and gout, when the pulse was good, digitalis only produced more hammering heart action when the heart was beginning to fail and "wanted to dilate." Digitalis might be added to potash treatment. In reply to an inquiry, Dr. Fothergill stated that he had no experience of digitalis in acute failure of the heart's action with delirium tremens; he did not think digitalis had any effect in Bright's disease, as a diuretic. To give it in aneurism would be apt to rupture the diseased vessel. In reply to another question he stated that he had no preference for tincture or infusion, and considered its application by poultice uncertain and heroic.

Thoracentesis in Phthisis.

In discussing a case in the *Lancet*, Dr. A. D. L. Napier writes—

My principal object in bringing the case under the notice of the profession is to suggest inquiry as to—(*a*) Are we justified in treating cavities in phthisical lungs, as is mostly done, by non-interference? or (*b*) Would it be wise to have more frequent resort to operative procedure? In many, I may say in most cases, in the third stage of phthisis, occurring in children, the existence of cavities is easily diagnosed. Were we to interfere as soon as a cavity could be discovered, by means of operation, and the insertion of a drainage tube, with due antiseptic precautions, is it unlikely that lives could be prolonged, or mayhap saved, which otherwise would be inevitably doomed? As to the means of operating, I conceive that with a large trocar and canula, or even an ordinary straight bistoury, we are as efficiently armed, and more so than with any of the existing aspirators. The objections to aspirators in empyema have been well weighed ere now, and in country practice the more simple and familiar the instruments, the more

frequently will they be used. No difficulty arises from antisepticism, as a small hand spray-producer, which can be easily managed by the most inexperienced, is quite sufficient for the purpose. It may be that in most instances little permanent benefit would result, but if we should have as satisfactory a proportion of cures as after tracheotomy in diphtheria (a modest enough hypothesis) why countenance the one and condemn the other procedure? The most probable secondary result is emphysema, though this is not a necessary sequence, and even were it so, it would be by no means a sufficient deterrent.

Conclusions Regarding Dipsomania.

The following conclusions are those given in an address by Dr. Gilchrist, reported in the *British Medical Journal*. 1. Dipsomania is a true neurotic disease. 2. In a very large proportion of cases, if not in all, it is hereditary. 3. In a large number of cases it is traceable to drinking habits in one or both parents, or connected with them in more remote relationships. 4. Its neurotic character is indicated—*a*. By its tendency to periodicity; *b*. By its incurability; *c*. By the loss of self-control over a dominant propensity in those subject to it; *d*. By the intellectual, and especially moral, peculiarities of its victims. In the above characteristics are seen its intimate relationship to, if not identity with, ordinary insanity. 5. In its treatment there is to be recognized two essentially distinct conditions; the neurotic peculiarity, which is permanent and irremediable, and the direct results from the poisoning of alcohol, which are temporary and remediable. 6. If the term "recovery" is to apply to the latter conditions only, 90 to 100 per cent. are curable. If it is to include the former also, 5 per cent. will be found a liberal allowance; that is, not more than 5 per cent. of the patients will be so far modified by any treatment as to enable them to resist, during the remainder of life, the propensity to drinking. Dipsomania, like other forms of insanity (neurotic diseases, if preferred), is a sad inheritance from the sins of our fathers. It is very rarely the result merely of vicious habits in the individual subject to it. If it is to be dealt with effectually, we must extend the horizon of our views beyond individual cases, or even the present generation. "Prevention *versus* cure" is the true, if not the only, treatment.

Conditions Necessary for Contagion to Spread.

In a recent lecture, Dr. R. Southey, of London, says—

For communicable disease to spread, three things are requisite: (1) an infecting poison, an animal cell or graft, some germ or microspore, or some potential fluid; (2) some means of connection or insertion of this poison; (3) receptivity or aptitude in the person who receives this poison.

If the atomic form of the poison is large, it may be believed to be heavy; the larger, the heavier and more tangible it is, the less readily will it travel from person to person. The contagiousness of the disease communicated will therefore appear immediate or most direct; those nearest in contact with the affected person will suffer most. If, although heavy, its vitality is great, it may be conveyed about by clothes or fomites. If its vitality is small and it is quickly destroyed by diffusion through air or water, it will not travel far, and must be inserted quickly in a fresh body, to provoke its special reaction.

There is much reason to think that the plague poison, syphilis poison, the smallpox and typhus poison, is of this heavy form and low vitality. But the poison of cholera and typhoid fever is probably an example of a lighter, subtler substance, and one of greater vitality; since, although sometimes carried into the body by food or water contaminated by human alvine excreta, the cholera poison is probably also borne in the blue mists observed in most cholera epidemics; and neither the cholera nor the typhoid poison appears to be destructible, although diluted in any quantity of cold water. The syphilis poison probably quickly loses its vitality or propagating powers; once dried, I believe its life history is ended. But the variola and varioloid poison may be dried, and, if neither frozen nor overheated, like mummy grain, it will certainly retain its infecting properties for years. So, too, the scarlet fever, yellow fever, plague, and typhus poisons can lie dormant in a drawer or cupboard for weeks, or months, or years, awaiting the conditions which shall favor future development. The plague is said to have broken out afresh after a hundred years, in consequence of the reopening of a plague pit.

Idiopathic Gangrene of the Penis.

The following interesting case was reported by Mr. Gay to the Pathological Society of London. The patient was thirty-one years old. He was a healthy man, free from syphilitic taint, exposed in his work to long walks and damp. His illness began with an attack of tonsillitis, which left him weak, and before he had recovered he was attacked with rheumatism in his knees and ankles, which passed off, and he then suffered from pain in his calves and feet. This also subsided in a few days, and he then had severe supraorbital pain, with œdema of the eyelids; on the subsidence of this a rash appeared on the bend of both elbows, which faded in a few days, when he was again attacked with pain in the calves of the legs and swelling and tenderness along the external saphena vein. Then followed severe pain deep in the perineum, and in two or three days the penis became engorged with blood, tense, and rigid, and ultimately sloughed and separated. The superficial parts of the penis were œdematous, but not gangrenous. The man recovered. Mr. Gay considered that this was a case of metastatic rheumatic phlebitis, which ultimately led to thrombosis of the internal iliac veins, involving especially the prostatic and pudic branches, and spreading slightly into the external iliac vein, as was evidenced by the œdema of the sheath of the penis. He pointed out that while all the cutaneous veins of the body communicate very freely, and in most regions the superficial and deep veins have many anastomosing channels, in some regions, as the penis, the venous channels of the skin and of the deeper parts were quite separate, and that when the deep veins were plugged the circulation could not be carried on through the superficial vessels, but gangrene must

occur. Whether a gangrene should be dry or moist he considered depended upon the condition of the patient, and not upon the cause.

Reviews and Book Notices.

NOTES ON CURRENT LITERATURE.

——Of the many Guides and Seed and Plant Catalogues sent out by our Seedsmen and Nurserymen, and that are doing so much to inform the people and beautify and enrich our country, none is so beautiful, none so instructive, as *Vick's Floral Guide.* Its paper is the choicest, its illustrations handsome, and given by the hundred, while its Colored Plate is a gem. This work, although costing but five cents, is handsome enough for a Gift Book, or a place on the parlor table. Published by James Vick, Rochester, New York.

——The *Archives of Dermatology*, a quarterly journal of skin and venereal diseases, published by Putnam's Sons, will, on and after January 1st, 1879, be published by J. B. Lippincott & Co., of this city.

——A valuable contribution to the study of lacerations of the cervix uteri, is the address of Dr. William Goodell, at the last meeting of the Pennsylvania State Medical Society. It is reprinted in pamphlet form.

——According to Dr. Otis, of the National Medical Library, Washington, the total number of regular medical journals now published in the United States, is fifty-one.

——The *Archiv der Heilkunde*, an estimable German journal published at Leipzig has suspended, for want of support.

BOOK NOTICES.

Modern Medical Therapeutics; a Compendium of Recent Formulæ and Specific Therapeutical Directions. From the practice of eminent contemporary physicians, American and Foreign. By George H. Napheys, A.M., M.D., etc. Sixth edition, enlarged and revised. D. G. Brinton, Philadelphia, 115 S. Seventh St., 1879. 1 vol., 8vo, pp. 607. Price, cloth, $4.00; full leather, $5.00.

No higher testimony to the value of this work to the medical public can be offered than the fact that in less than a year the previous edition of the book, although the fifth one, was completely exhausted. Another striking fact of the same nature is, that although the publisher has had a standing offer to all who buy the book by mail, and, consequently, on the faith of notices and descriptions, to take it back and refund the money if it, on arrival, disappointed them, *in not a single instance* has he been requested to do so!

With the general plan and character of the book we need not occupy space. They are well known, from the reviews of the book in previous editions. Suffice it to say that in the present edition no changes in these respects are made. The material of the book has, however, undergone extensive modification. This the editor announces in the preface. He has what will by some be called the audacity to declare that "Standard treatises on practice, written by men still living, have, in many instances, become in great part obsolete. Watson and Wood, Aitken and Tanner, no longer represent the best therapeutics of the day. Their methods and their remedies have been largely superseded, and the practitioner who would keep abreast of the advances made in his profession must look to a more modern class of writers for his information."

The editor does not specifically name who these modern writers are, but that he has acquainted himself with them to some purpose, would appear from the fact that the Index of Authors in this edition contains *one hundred and eighty-eight* names of medical writers who were not quoted in the previous edition. They are authors of the latest monographs and treatises, and contributors to the medical periodical literature of the last two years. Somewhat more than half belong to English speaking countries; the remainder are principally German, French, and Italian. This indicates a very thorough revision of the last edition, and the extent of the improvements which have been made in it.

Various subjects are introduced which were omitted in the previous issue. For instance, we notice yellow fever is introduced, and a number of authors quoted, showing its treatment in South America, Havana, Savannah, Charleston, New Orleans, etc. Typhus fever, acute and chronic mercurial poisoning, lead poisoning, and a number of diseases of children, are also additions. The last mentioned department, that on children's diseases, has been more than doubled in size, which its importance certainly demanded.

In fact, the number and variety of the changes in the present edition almost give it the character and value of a new book, and those who already own one of the previous issues would find the purchase of the present by no means a useless or superfluous outlay.

THE

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THE GROUNDS OF CERTAINTY IN MEDICAL REASONING.

In the discussion between VIRCHOW and HAECKEL, to which we alluded last week, one very weighty and often misunderstood subject was in controversy between them.

To the statement made by VIRCHOW, that only well-ascertained facts should be taught in schools, HAECKEL replies, derisively, "What do we know for certain? Even in mathematics, the most certain of all human knowledge, men are now disputing whether there may not be a fourth dimension in space. What do we know of the nature of matter or of force? What is there certain in physics and chemistry? Why, then, is the origin of man a subject on which nothing should be taught, because it is uncertain?"

To this several answers suggest themselves. There is certainly a difference between facts and fancies, laws and guesses, and all that VIRCHOW maintained was that, *in schools*, what are commonly called "known and accepted truths" should be taught; and no reasonable being (HAECKEL excepted) will be likely to dispute his statement.

But HAECKEL'S queries cut deeper. It might appear that he really means that there is no higher test of knowledge than belief; forgetting that not belief, but the *impossibility of disbelief* is the final and crucial test of knowing. A sane man cannot believe that twice two make five, no matter how much he tries. This gives its certainty to mathematics, and all so-called "laws of nature" are entitled to rank as such only when they can receive abstract mathematical expression.

These discussions concern very intimately the science of medicine, for it busies itself wholly with natural laws, and it is just as essential to its successful prosecution that the superficial glosses of materialism and positivism be recognized, as that the superstitions and dogmas of metaphysics and supernaturalism be estimated at their real value.

Professor HELMHOLTZ, in an address "On Thought in Medicine," last winter, sounded the alarm none too soon when he said, "Our generation has suffered under the pressure of spiritualistic metaphysics; the rising one will have to be on its guard against materialistic philosophy."

Metaphysical systems have supported two lines of argument. According to the spiritualistic idea, man may regard himself as a being of higher quality, towering above the rest of nature. The materialists consider him as unqualified master of the world, through the exercise of his mind upon the conceptions he has formed.

But one who, like the physician, has to deal with the safety- or destruction-bringing powers of nature, has the duty, under heavy responsibility, of seeking a knowledge of the truth, and of the truth alone, regardless whether what he finds flatters one or other of these classes. His aim must be clear, and the actual result alone decisive. He must strive to ascertain what the consequences of his proceeding will be under given circumstances. To acquire this power of forecast we have no other means than seeking, by observation, a knowledge of the laws of things; and this we must acquire by careful search for, and study of, such

cases as belong to them. If we suppose that we have discovered a law, then commences the work of deduction. We must endeavor to trace its effects; but also, and first, to test it by experience, so far as it can be tested, and ascertain when and in what range it holds good. This is a labor which should, properly, never cease. The true natural philosopher considers, on every strange appearance, whether the well-proved laws of action of long-known powers can have undergone any modification; naturally, however, there can only be question of such a change as does not contradict our stores of accumulated experience. Thus he never arrives at absolute truth, but only at a high degree of probability, which, practically, is equivalent to certainty.

Let the metaphysicians smile; we will take their derision to heart when they are able to do better, or even so much. On the other hand, let not a hasty materialism depreciate the value and reach of such knowledge. To a great degree it is more absolute than it is ever willing to concede; for it is as certain as Reason, and as wide reaching as the Universe.

Notes and Comments.

Potato Eating and Diphtheria.

Dr. M. C. Keith, of Lincoln, Neb., writes to the Chicago *Inter-Ocean*, charging much of the diphtheria prevalent to eating white (Irish) potatoes. He says—

Some seventeen years ago the attention of my father, Dr. Alvan Keith, late of Augusta, Me., was called to the fact that children who were not fond of the tuber known as the Irish potatoes were not subject to attacks of that much-dreaded malady diphtheria. Following out this hint, he advised families of his friends to avoid the use of this vegetable among the children, and until his decease he was accustomed to make the assertion that rotten potatoes produced the throat disease known as diphtheria. * * * * * *

In my practice in this city and county the offer has been to treat any one free of compensation if they would avoid the use of Irish potatoes. As a sequence not one of the patients who was not a potato eater has been threatened with the disease. In many of the inland towns of this State the writer has patients, and in some of the infected districts the families of those who have learned of this simple preventive have escaped any attack of throat disease, although the potato eaters on either side of them have unfortunately had cases of diphtheria which resulted fatally. * * * *

The writer rests his assertions upon a record of twelve years of his father's practice prior to 1861, and seventeen years of his own, covering a period of twenty-nine years, and including a personal knowledge of 1100 cases of diphtheria. The tuber known as the Irish potato is specified, since it is believed that sweet potatoes do not have the effect of producing any disturbance in the human animal economy. If these assertions are proven, the result must relieve the world from a disease much to be dreaded, and a malady which has caused many heartaches upon two continents.

Peculiarities of Inebriety.

The Fourth Annual Report of the Asylum for Inebriates at Walnut Hill, Hartford, Conn., is an interesting document, and the history of the past year is very ably presented by the superintendent, Dr. T. D. Crothers. The particulars of a number of cases which have been under treatment are presented.

Many curious facts are presented, in a history of these cases. Take, as an illustration, the periodic character of the drink-craving, which returns after an interval that can be definitely calculated within an hour; or the insane-like madness which ignores everything but the gratification of its impulses; or the precipitate revulsion of character and motive, passing swiftly from one extreme to the other; or the sudden explosion of the diseased impulses, under conditions of excitement and change, etc. All these are significant of laws and forces moving in regular cycles as fixed and definite as that which governs the planets.

The Forms of Antagonism in Drugs.

The antagonistic action of different remedial agents has attracted considerable attention lately. Dr. Fothergill's little work on the subject is fresh, and has served to whet the interest of reading men. The same subject is treated by M. J. L. Prévost, in the *Archives de Physiol. Normale et Pathol.*, chiefly in relation to the antagonistic properties of atropin to muscarin. The author proceeds to show that there are the following kinds of antagonisms: *a.* True antagonism, occurring in cases in which two poisons act in opposite ways upon one and the same anatomical element, as, for instance, by exciting or paralyzing a nervous element; *b.* False antagonism, when the poisonous symptoms are suppressed by making use of an agent which renders the manifestation of the

symptoms impossible; this occurs after the injection of curara, in a case of strychnia poisoning; for the curara, paralyzing the motor or efferent nerves, prevents the appearance of tetanus caused by strychnia. Another example of false antagonism is, when two poisons act upon two different parts of a complicated organ; as is the case when atropin and physostigmin are applied successively to the eye.

Eczema Produced by Oxyurides.

Dr. Michelson reports, in the *Berliner Wochenschrift*, the case of a child, thirteen years old, who complained of itching in the inguinal region, which was found to be the seat of an impetiginous eczema marginatum, suggesting the presence of trichophyton. The centre of the eruption presented a moist surface covered with little red points, and with fœtid debris of macerated epidermis. Microscopic examination revealed, not a vegetable parasite, but the eggs of the oxyuris in various stages of development. It is probable that the worms were attracted from the rectum to the parts prepared for the reception and development of their eggs by the heat and moisture of the eczematous skin. Cure was rapidly effected by warm baths and a lotion of salicylic acid.

The Species of Tapeworm Now Prevalent.

At a meeting, last month, of the Academy of Natural Sciences, of this city, Professor Joseph Leidy exhibited two specimens of tapeworm from the human subject. One had been submitted to him for examination by Dr. Levick, and the other by Dr. Walter Atlee. During the past fifteen years he had examined from two to five specimens yearly, sent to him by physicians who desired his opinion regarding the specific characters of the worm. It was formerly supposed that the tapeworm commonly found in man was tænia solium, the immature form of which infests the hog, and obtains a lodgment in the human body by the use of raw or badly cooked pork. He had been surprised to find that all the specimens examined by him during the time mentioned belonged to another species, the tænia medio canellata, the larva of which is found in the cow. It is, therefore, the lovers of raw or rare beef who foster this form. This species is readily distinguished from tænia solium. The head is conspicuously larger, of a square shape and blackish color. It is provided with four suckers, but without the hooks so characteristic of tænia solium. There is also a striking difference in the joints, by means of which detached segments may be distinguished from those of the pork worm, the ovaries in tænia medio canellata being exceedingly complex and branched, and of a dark color, while in tænia solium they are comparatively few and simple, and of a lighter tint. Leuckart states that the Abyssinians are infested with tapeworm, almost to a man, from their habit of eating raw beef, which they esteem a great delicacy. They not only eat the meat uncooked, but the living animal is driven up to the door of their banqueting halls, and pieces of quivering flesh are cut from it and served to the guests, until the poor tortured creature falls, exhausted by pain and loss of blood. These people do not consider the presence of the parasite a disadvantage, but rather otherwise. When the worm grows too large, they simply cause the expulsion of some of the segments, and allow the head and the remaining portions to grow again until they become of an inconvenient size.

Suicide and Insanity.

The January number of the *Sanitarian* contains a paper read by Hon. O. H. Palmer before the New York Medico-legal Society, to prove that suicide is not an evidence of insanity. This seems superfluous, as we should think none but a very biased person would maintain the affirmative. Mr. Palmer says, in one part of his address, "Suicide is a pronounced sin, abhorrent to Christianity and severely denounced in the word of God." We have heard it said that no direct condemnation of suicide is to be found in the Bible. The prejudice against it, unknown in ancient Greece and Rome, is asserted by Schopenhauer to have been an emanation of the feudal system, wherein the life of a person belonged to his liege lord.

Hints for Headaches.

Dr. Day says, in a late lecture: Whatever be the plan of treatment decided upon, *rest* is the first principle to inculcate in every severe headache. Rest, which the busy man and the anxious mother cannot obtain so long as they can manage to keep about, is one of the first remedies for every headache, and we should never cease to enforce it. The brain, when excited, as much needs quiet and repose as a fractured limb or an inflamed eye, and it is obvious that the chances of shortening the seizure and arresting the pain will depend on our power to have this carried out effectually. It is a practical lesson to be kept steadily in view, in that there may lurk behind a simple headache some lesion of unknown magnitude which may remain stationary if quietude can be maintained.

There is a point worth attending to in the treatment of all headaches. See that the head is

elevated at night, and the pillow hard; for, if it be soft, the head sinks into it and becomes hot, which with some people is enough to provoke an attack in the morning if sleep have been long and heavy.

Effects of Chronic Starvation on the Mind.

An English surgeon who witnessed the late famine in India, observes that the dullness, the apathy, the unfitness for labor, and the unwillingness to use the smallest exertion to better their condition, so often shown by the famine stricken, "are a part and parcel of the disease, 'chronic starvation,' and must in future be so regarded and treated." They are not to be disposed of "by statements of loose observers," that such people are idle or obstinate.

Is is shown, by the pathological observations of Dr. Porter, that the nervous system shares in the general waste of the body. Dr. Porter's own conclusions from his investigations is, "that the brain wastes in starvation, like other tissues of the body, but in a less degree; and this atrophy of the brain would account for the effusion of serum into the arachnoid cavities and sulci of the brain, that is so frequently found in these cases."

Chloral in Migraine.

Dr. Seure, in the *Bull. de Therapeutique*, strongly recommends the administration of chloral, in an enema, on the occurrence of the paroxysms of migraine, having found it almost infallible, and exempt from the disadvantages attendant on other modes of giving this substance, and far preferable to the employment of morphia, quinine, etc., for the same purpose. He gives, according to the sex or robustness of the patient, from one and a half to three grammes, in a glass of tepid water, the effect of the chloral being rendered still more prompt by the addition of a tablespoonful of brandy. If a sense of burning in the rectum is excited, this may be prevented by adding the yolk of an egg or substituting tepid milk for the water. When, as in some persons, there is difficulty in retaining the enema, the quantity of the liquid may be diminished, and a drop or two of laudanum added.

Influence of Uterine Disease on Nervous Disorders.

A recent writer counts among the most notable instances of this, neuralgia supra-orbitalis, maxillaris, and laryngo-bronchialis (uterine cough); also neuroses of the heart, causing painful palpitations, and spasmodic contractions of the bladder and bronchi (uterine asthma). All these symptoms become aggravated at the time of the commencement of the menstrual flow. The author observed one patient affected with this kind of asthma, who had long passed the climacteric, but whose asthmatic attacks were always most severe at the times at which the menses used to appear. Ordinary asthma also becomes worse under the influence of uterine disease.

Uterine affections frequently give rise to spasm of various muscles and to paralysis of one or both lower limbs. Both of these conditions usually come on very gradually, and they never become complete.

The peripheral reflex irritation caused by uterine diseases often acts, in conjunction with other causes (*e. g.*, hereditary taint, defective nutrition, domestic trouble, etc.), in giving rise to mental disease.

The Physiology of an Easy Chair.

A writer in *Nature* sums up the "points" of an easy chair as follows:—

For an easy chair to be perfect, it ought not only to provide for complete relaxation of the muscles, for flexion and consequent laxity of the joints, but also for the easy return of blood and lymph, not merely by the posture of the limbs themselves, but by equable support and pressure against as great a surface of the limbs as possible. Such are the theoretical demands, and these are fulfilled by the bamboo easy chairs manufactured in India, made in the shape of a straggling W, which the languor consequent upon a relaxing climate has taught the natives of India to make, and which the rest of the world appreciates.

The Best Form of Mercury for Hypodermic Use.

Dr. R. Kirk gives, in the *British Medical Journal*, his experience on this subject while he was at the Edinburgh Lock Hospital; he says—

Six solutions were used during my term of office; the bichloride with morphia; the albuminous solution of the bichloride; Savory and Moore's lamels; a simple aqueous solution of the bichloride; the biniodide; and the bicyanide. The last two were soon discontinued, as possessing no perceptible advantages over the others; but two series of comparative experiments with the other four were made with the utmost care. The first series was conducted to determine which produced the least irritation, and the patients were injected with all four solutions in rotation, with the result, rather surprising, I must admit, of showing that the simple aqueous solution of the bichloride, two grains to the ounce, produced as little irritation as any of the others. In the whole series of over three hundred injections, there was not a single

boil, and only on rare occasions was there induration enough to cause tenderness. The second series showed that the amount of mercury required was the same, whatever solution was employed.

The only reasons to which I can ascribe these results are; thoroughly cleansing the syringe-needle before each injection, and inserting the needle perpendicularly and deeply into the subcutaneous tissue. I believe, if these two points are carefully observed, that mercurial injections may be given with almost perfect safety, and with a solution so simple as an aqueous one of the bichloride.

The Causes of Heat in Fever.

As the result of some recent researches, Drs. Leyden and Frænkel suggest that the increased formation of carbonic acid cannot alone be held answerable for the rise in temperature. It represents one factor only, although one of great importance. A second factor is the altered discharge of heat under the influence of the cause of the pyrexia, the immediate mechanism of which is probably to be sought in a peculiar change in the innervation of the cutaneous and pulmonary vessels. Hitherto only one consequence of this altered vascular innervation was known—the rigor. Very recent experiments of Bachrach suggest another effect: it has been found that, under ordinary circumstances, substances easily recognizable in the urine, as iodide of potassium, were absorbed far more quickly if injected under the skin than if administered by the mouth. In fever, however, the reverse is the case; iodide appears in the urine far more rapidly if given by the stomach than if injected under the skin.

Oleate of Zinc.

Dr. H. R. Crocker has reported very favorably, in a recent number of the *British Medical Journal*, on the use of oleate of zinc in eczema. It is chiefly useful in the discharging stage of the acute and chronic forms of the disease. The preparation used by Dr. Crocker was made by the following process: One ounce, by weight, of oxide of zinc is stirred with eight fluid ounces of oleic acid, made as free as possible from palmitic acid. The mixture is allowed to stand for two hours, and is then heated until the oxide is dissolved. On cooling it forms a yellowish-white hard mass. An ointment can be made by mixing one part of the oleate with one part of cosmoline, or two parts of lard or simple ointment. When made with the two latter materials it quickly becomes rancid, but cosmoline preserves it for a long period.

CORRESPONDENCE.

The Cause of Yellow Fever.

ED. MED. AND SURG. REPORTER:—

I shall attempt to give your readers a few thoughts and conclusions on that all-absorbing question, yellow fever. It is only with the cause that I propose to deal in this letter. I have not been an eye witness to this suffering, and therefore must draw in part, for my conclusions, from the testimony of others; however, a long familiarity with what I consider to be the real cause (only in a modified form) gives to me, even from this remote standpoint, the privilege of drawing my own conclusions and asserting the same in my own language. Then, first, I assert that yellow fever is of malarial origin, and the most malignant of that order to which it belongs.

The lower Mississippi, with its tributaries, in connection with that low, marshy region of country bounding it on either side, together with its proximity to the solar rays and prolonged intensely hot season, all conspire with other favoring circumstances, to supply the elements requisite for the propagation and elimination of this miasmatic poison. The fruit of this in that locality is yellow fever, while in this region of central western Illinois, latitude 40°, and the continuation of the same malarious valley, we find the more mild forms of the same disease, from the same cause, namely, congestive, remittent and intermittent fevers, with their numerous modifications. We do not believe science, with all her appliances, has by any means succeeded in controverting or robbing of its merits that old and so-called fogy theory of the production of malaria by the combined action of heat, moisture, and vegetable decomposition. If any new light has been shed upon this subject, it has certainly been that of the additional and even more poisonous effluvia emanating from animal decomposition. This we are willing to admit as being one of the factors in the cause of the malaria of that region, the populous cities especially, where sewer effluvia must be profuse.

Here we claim an argument in favor of malaria being a local cause of the fearful disease, yellow fever, also, that the mouth of the Mississippi, New Orleans and vicinity, is the laboratory from whence this disease originates. In proof of this we have only to consider the magnitude of the supply, both of animal and vegetable material, constantly accumulating and drifting into this great abyss, and when accumulated there, favored with every natural and artificial condition for rapid decomposition. Why doubt the above when we contemplate the vast extent of territory, north, south, east and west, settled and unsettled, frequently flooded and always drained by the tributaries of this vast river, pointing, as they do, in every direction, and extending from lake Itaska to the Gulf, and from Rocky to Allegheny mountains, gathering in their embrace every manner of filth, both animal and vegetable. In fact, it may be said every northern settlement has an outlet of this kind. The carcasses of many animals find a grave in the Mississippi, never to be withdrawn save by the process of decomposition, and this at the expense of the lives of thousands. Then why

should we contend that this disease is imported, when we possess in our very midst a laboratory with every natural, artificial and chemical apparatus for its home production. For further proof, let us traverse this deep, rich and otherwise fertile valley, and briefly sum up these speculations.

As before stated, we have been prescribing at this point, to some extent, every season, and to a great extent occasionally, for all grades of malarial fever, from congestive to mildest intermittent, all susceptible, usually, of successful treatment. However, a few degrees below this, in the same valley, we find a similar disease, originating from the same cause, but more severe, showing evidently greater concentration of the exciting cause. But at Cairo, the junction of the Ohio with the Mississippi, some four degrees below, and where the low marsh lands swell into extensive swamps, wet and spongy, with frequent fogs, malarial disease is a constant attendant. In fact, few were the soldiers or officers of the late war, detained at this point, who did not realize by their own sufferings the marked increase in the force of the poison. Here our personal survey of this malarial valley terminates, but history, the topography of the country, and the experience of every one familiar with the diseases of the lower Mississippi valley, testify to the fact that at almost every degree as we descend toward the Gulf may be observed this increase, not only in malarial products, but its additional force and virulence, as shown by the aggravated type of the disease produced. In this same ratio does the cause and consequent results seem regularly to increase, until we arrive at the foot of this death-stricken valley, with its populous city of New Orleans, where the most fatal disease exists, and in our opinion is produced. Yes, we repeat, this seems to be the great national receptacle for all filth, pollution and putrescence; the reservoir from which occasionally bursts forth and originates more miasmatic poison than would suffice to prostrate a nation of people. We shall, for the present, close, promising something on the subject of contagion in relation to the above disease.

Alepis, Ill. J. P. McCLANCHARD, M.D.

Acetate of Potassa.

ED. MED. AND SURG. REPORTER:—

I would call the attention of the younger class of practitioners to this old but most excellent remedy.

I take notice that a large proportion of the profession seldom prescribe this agent. While I will admit it may not cure a single disease, yet I hold that it is a fine adjuvant in a large number, both of acute and chronic diseases. Given in doses from ten to sixty grains, as indicated in many forms of disease, even with other proper remedial agents, it acts promptly as an excellent diuretic. But it may be asked, why is it better than many other diuretics, such as buchu, uva ursi, juniper, digitalis, colchicum, etc. This is a very important question, and I will proceed to answer.

The kidneys perform two separate and distinct functions. These functions are the excretion of water from the blood, and removing certain nitrogenized matters, the product of the waste of worn-out tissues. The first relieves vascular turgescence, and the second removes matter from the blood.

Urea forms a large amount of the solids of the urine, as well as uric acid, creatine, hippuric and lactic acid, and the soluble salts; and when these elements are retained in the blood, in any form of disease, in suppression or retention of urine, set up an irritation, and probably vomiting, diarrhœa, spasms, convulsions, coma, etc., are produced by this excrementjtious matter retained in the blood, which should at all times be promptly removed.

The renal hydragogues, or the common vegetable diuretics that I have named will only increase the fluid portions of urine, while a very large proportion of the solids of the urine remain in the system, as Dr. Krahmer has so well proven in his experiments.

But we claim, by experience and observation, that the acetate of potassa is a renal depurant, when given properly, greatly increases the flow of urine, and particularly the solid constituents of it, making a splendid remedy, as an adjuvant in all febrile and inflammatory diseases. This alkaline diuretic is not only eliminative, but thus acts as a refrigerant.

Acetate of potassa, when taken into the stomach, is absorbed into the circulation and has a direct affinity for the kidneys, stimulating them to increased action, and in its transit from the stomach to the kidneys the acetate of potassa is converted into carbonate, which separates the *solids* of the urine from the blood, and then both the solids and the urine are jointly eliminated. In sthenic fever it acts as an antiphlogistic; in asthenic or typhoid fever it indirectly increases the strength of the patient by removing the materies morbi, which usually so depresses the vital powers. In rheumatism, Dr. Golding Bird says, "I would not willingly use language which was not completely compatible with experience; but I do not still hesitate to declare that I have never seen the disease in question yield with so much facility to any other remedy."

The action of this remedy in chronic diseases, where we find an unhealthy state of the blood, is truly *alterative*, removing vitiated materials circulating in the blood, thus promoting digestion, assimilation and nutrition. Hence it is indicated in a large class of those diseases.

I do think, from close observation, and experience in the course of twenty years, that the kidneys need stimulant diuretics nearly as often as the bowels do cathartics.

I treated five or six cases of dropsy the past year, and in every case I practiced on this plan, and was successful in every case; of course I gave such other treatment as was indicated. I generally prescribe the remedy in solution, giving from five to ten grains every four to six hours, alone or combined with such other remedies that are not incompatible, as may be indicated.

I hope these suggestions may lead others to thinking. DR. JOHN A. HENNING.

Redkey, Indiana, December 15th, 1878.

—The papers think it was a little odd that Senator Sargent, of California, should go away to Florida, or Havana, or thereabout, recently, for his health, when his two daughters are students of medicine—one, in fact, graduated and practicing her profession at the Capital.

News and Miscellany.

State Medicine in Pennsylvania.

The Governor of Pennsylvania says, in his message to the Legislature, just published—

Among the numerous subjects that will occupy your attention, I beg leave to briefly emphasize a few that appear of more than ordinary importance.

The establishment of a State Board of Health was urged in the message of 1877, and briefly referred to in that of last year. The Medical Society of the State of Pennsylvania will again bring the matter to the attention of the Legislature. The experience of the past year has shown the desirableness of such a department to improve the hygienic condition of the people and insure against epidemics. Second only to its police duties, if not, indeed a part of them, is the obligation of government to enforce the sanitary regulations necessary for the healthfulness of society. I hope you will not fail to give the bill presented a favorable consideration.

Extracts from the Bulletin of the Public Health, Issued by the Surgeon General United States Marine Hospital Service, for Week ended January 4th, 1879.

Yellow Fever.—The present issue of the Bulletin is the first for which no cases or deaths were reported.

Bermuda.—The United States Consul reports that in a population of over 15,000 there is rarely more than one death per week, and that the island is remarkably free from all infectious diseases.

St. Petersburg.—Late advices state that the "plague" has reappeared on the northern shores of the Black Sea, where it is supposed to have been imported by Cossacks returning from Turkey. Astrachan is the central point of infection, and the Russian health authorities are making vigorous efforts to prevent the extension of the disease.

In England, during the past year, tents have been used for treatment of cases of scarlet fever and small pox, in towns where the diseases prevailed in epidemic form, with most satisfactory effect in arresting their spread.

The "Index Medicus."

It is generally known to the medical profession and those interested in bibliography that Dr. John S. Billings, Surgeon U. S. A., in charge of the National Medical Library, at Washington, is now ready to print his great "National Catalogue of Medical Literature," as soon as Congress grants an appropriation for the purpose. This indexes, under subjects, and by authors, books, pamphlets and original papers in nearly all the medical periodicals of the world; including over 400,000 subject entries, and making ten volumes royal 8vo, 1000 pages each. This will be of the greatest value to physicians the world over, as it enables them to find analogues for peculiar and difficult cases, and thus often to save lives. In continuation of this work, it is now proposed to publish monthly, under the editorship of Dr. Billings and of his assistant, Dr. Robert Fletcher, M.R.C.S., a current medical bibliography, under the title of the *Index Medicus*. It will be issued by F. Leypoldt, the bibliographic publisher, 37 Park Row, New York, at $3 per year, and will enter all medical books and index the leading medical journals and transactions in English and other languages. A full list of the latter, numbering over 600, will form a part of the specimen number of the *Index*, soon to be issued.

Investigation of the Yellow Fever.

The proceedings of the Board of Experts authorized by Congress to investigate the yellow fever epidemic held their first meeting at Memphis, December 26th, 27th, and 28th. The next meeting was decided to be held at Washington, January 15th. The following members were present: Dr. Bemiss, New Orleans, La.; Dr. Chaillé, New Orleans, La.; Dr. Cochran, Mobile, Ala.; Dr. Craft, Jackson, Miss.; Dr. Falligant, Savannah, Ga.; Dr. Green, Boston, Mass.; Mr. Hardee, Engineer, New Orleans; Dr. Mitchell, Memphis, Tenn.; Dr. Mosher, Albany, N. Y.; Dr. Randle, Philadelphia, Pa.; Dr. Swearingen, Austin, Texas; Dr. Woodworth, Washington, D. C. A thorough organization was effected, and the work laid out and assigned so as to be completed at an early day, in an effective manner.

Personal.

—Dr. C. C. V. Crawford and Captain B. F. Miller, of Tinicum, are candidates for Quarantine Master. Dr. A. W. Mathues, of Media, does not seek reappointment.

—Dr. William McKenzie, of West Conshohocken, has been elected President of the Montgomery County Medical Society, for 1879.

—Dr. Frank Woodbury, of this city, has been appointed Assistant Editor of the Boston *Medical and Surgical Journal*, and will take charge of its interests in this city, receive communications, etc.

Obituary Notes.

—Dr. Peter J. Crispell died at his home, at Hurley, Ulster county, N. Y., December 19th, in the eighty-fifth year of his age. Dr. Crispell was born in the Town of Hurley, in the northerly end of the old hamlet of that name, in the house now occupied as the parsonage of the Reformed Church. He was for twenty-five years President of the County Medical Society. He was always, until of very late years, an active politician, was presidential elector, and voted for Martin Van Buren in 1836. He subsequently became a Whig, and afterward a Republican. He was elected to the Assembly in the fall of 1848.

MARRIAGES.

Powell—Jarvis.—In Piqua, O., December 24th, 1878, at the residence of the bride's parents, by the Rev. J. H. Burton, W. S. Powell, M.D., of Defiance, O. and Miss Libbie J. Jarvis.

DEATHS.

Golder.—In New York, on Monday, Dec. 30th, Valentine Mott Golder, M.D., only son of Dr. R. Henry and Catharine V. Golder, in the 31st year of his age.